

16 November 1977

MEMORANDUM FOR THE RECORD

SUBJECT: DCI Dinner Subjects suggested by [REDACTED]

STAT

First priority: "The Revolution in Information Processing:
Export Control." Suggested to work up the subject:

[REDACTED] This is a very big and fascinating subject.
[REDACTED] suggested that by focussing on the export control
problem (control of computers and computation processes)
most of the more fascinating aspects of the subject could
be introduced and explored.

Second priority: "Climatic Changes." Suggested to work up
the subject: [REDACTED] The question here is of various
prevalent opinions on secular weather changes, all more
or less alarming; and the contrary view that there is
nothing to be concerned about.

Third priority: "The Coming Communications Revolution."

Suggested to work up the subject: [REDACTED]
mentioned laser beams and fiber optics as examples of
what may be coming in the communications field, pointing

[REDACTED]

DIRECTOR OF CENTRAL INTELLIGENCE
Scientific and Technical Intelligence Committee

9 November 1977

MEMORANDUM FOR: See Distribution

SUBJECT: DCI Project on Technology Trends

1. At the initiative of the DCI a project is now under way to determine trends in technology which will drive the military weapon systems of the United States and the USSR for the rest of this century. This project is sponsored jointly by the Intelligence Community and the Office of the Director of Research and Engineering. It will be under the guidance of a steering group composed of

[redacted]
[redacted] The project will include a colloquium during the spring of 1978 at which papers prepared by external specialists on important areas of technology will be presented.

2. The DCI has appointed [redacted] of DARPA to the STIC Secretariat to serve as Director of the Project on Technology Trends. [redacted] will serve as the Administrative Assistant for this project. Both are located in room 5F43 on [redacted] (black) and [redacted] (gray)..

[redacted]
[redacted] Chairman

Distribution:

DCI/EA
DCI/Admin Officer
NFAC
OSI
OWI
(Continued on reverse)

Distribution: (Continued)

NFAC

ORPA

OSR

OER

OIA

OCR

OGCR

NIOS

A/D/DCI/IC

EO/ICS

SA/IR&D

Exec Sec - NFIB

Ch/Support Staff

DCI Cmt Chrmn

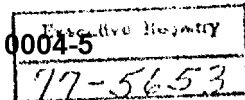
SA/SI/Compt



STAT

After lunch I had a note from Bowie suggesting that I talk to [] about a possible technological subject for a DCI dinner. I did so and [] suggested, as a first thought, that a dinner might be worked up as an advanced step on the study he is doing for the Director on future technologies. He will send me a copy of his paper.

[] said he'd be thinking about other subjects and would be in touch.



DIRECTOR OF CENTRAL INTELLIGENCE
Scientific and Technical Intelligence Committee

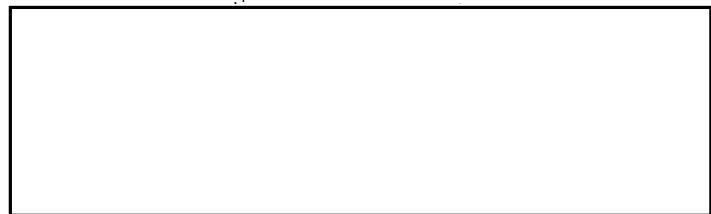
MEMORANDUM FOR: Director of Central Intelligence

FROM : [redacted] Chairman, Scientific
and Technical Intelligence Committee

SUBJECT : The Long-Range Impact of Advanced
Technologies

1. This memorandum is in response to your query to me at the meeting of the Committee Chairmen in May and your elaboration of it with the members of the DCI's Science and Technology Advisory Panel in June.

2. Attached for your consideration and comments is a draft of a proposed approach to the problem. It has been discussed briefly with [redacted] and reviewed critically by [redacted] (Assistant Director, OSTP) and the Scientific and Technical Intelligence Committee.



Attachment:
As Stated

APPROVED: [Signature]
Director of Central Intelligence

DISAPPROVED: _____
Director of Central Intelligence

DATE: 2 SEP 1977

SUBJECT: The Long-Range Impact of Advanced
Technologies

25X1

cc: OSTP/[REDACTED]
AD/DCI/IC

PROBLEM

What are the trends in technology which will drive military weapon systems for the rest of this century?

I. PURPOSE

The purpose of the project is to identify key trends in technologies and to assess their impact for the rest of this century on:

- ° US and Soviet military weapon systems

The impacts of new technologies on:

- ° military systems in countries other than the United States and the USSR
- ° economic development
- ° intelligence collection systems, and
- ° protective measures against intelligence collection systems

are of comparable importance and should be addressed at a later date.

This project will be sponsored jointly by the Intelligence Community and the Office of the Director of Defense Research and Engineering (ODD&E).

II. APPROACH TO THE PROBLEM

Planning for the project will be discussed in detail with the President's Science Adviser, with

STAT

STAT

the Director of Defense Research and Engineering, [REDACTED]
and with the Chairman of the DCI's Science and Technology
Advisory Panel (STAP), [REDACTED] These three persons
will be asked to serve as a Steering Group during the period
of the project. The proposed project will be carried out
jointly by the Chairman of STIC and a senior representative
of the DDR&E, with assistance from the Director of DARPA
and the Chairmen of WSSIC and JAEIC. It will be coordinated
with the appropriate NIOs. The project will be carried out
in five phases.

STAT

Phase 1 -- Identification of Key Areas of Technology
and Future Military Weapon Systems

The Scientific and Technical Intelligence Committee
will prepare from existing reports a consolidated
list of critical areas of technology which could
drive military weapon systems and a list of potential
key future weapon systems which could stimulate
advanced technologies. These lists would be reviewed
by persons and components such as:

- a. The President's Science Adviser;
- b. The Director of Defense Research and Engineering;
- c. Members of the DCI's Science and Technology Advisory Panel;
- d. The Director of Defense Advanced Research Projects Agency;
- e. Intelligence R&D Council;

OFFICIAL USE ONLY

Approved For Release 2005/12/14 : CIA-RDP86B00985R000200110004-5

- f. Certain members of JASON (a group of 40-plus eminent scientists) and other appropriate scientists;
- g. Certain planning staffs in the Unified and Specified Commands and in the military services.

Phase 2 -- Preparation of Draft Papers on Areas of Advanced Technologies and Future Military Weapon Systems

Individuals of high reputation in their fields within the government, industrial and academic communities will be invited to prepare papers on areas of technology and weapon systems identified in Phase 1, such as:

- a. Emerging Technologies
 - 1) Electronics
 - 2) Materials
 - 3) Ocean
 - 4) Space
 - 5) Nuclear
- b. Emerging Weapon Systems
 - 1) Aerospace
 - 2) Naval
 - 3) Ground

The author of each report on technology will be asked to highlight those specific technologies within his coverage which will drive most significantly the military systems for the rest of this century. The

Approved For Release 2005/12/14 : CIA-RDP86B00985R000200110004-5

OFFICIAL USE ONLY

OFFICIAL USE ONLY

Approved For Release 2005/12/14 : CIA-RDP86B00985R000200110004-5

author of each report on weapon systems will be asked to highlight those specific critical technologies on which the future weapon system must depend. Each of the reports will emphasize trends and their potential impact on future weapon systems.

Phase 3 -- Review of Draft Papers

The Steering Group, with assistance from members of the DCI's Science and Technology Advisory Panel, will review each of the draft papers and prepare comments and guidance for the author.

Phase 4 -- Colloquium

A colloquium would be held in Washington in late February for 2 to 3 days. One or more persons such as the DCI,

STAT would be invited to present opening speeches to include key issues facing the superpowers. These would be followed by presentation and discussion of the papers on technologies and weapon systems trends. One possibility would be for at least some of the conferees to divide into small workshops for discussion of each of the papers after their presentation to the group as a whole.

It is proposed that invitees to the colloquium represent the government, academic, and industrial communities. For government invitees it is proposed

OFFICIAL USE ONLY

Approved For Release 2005/12/14 : CIA-RDP86B00985R000200110004-5

that the Intelligence Community, OSD, ODDR&E, NSC, the military services, OSTP, National Science Foundation, NASA, and the National Academy of Sciences be included. The total list of invitees to hear the opening speeches and papers on technology and weapon systems might approximate 100 persons, with perhaps 30-40 participating in the workshops. Members of STAP and the ODDR&E will be important participants in the colloquium. The clearance level for the colloquium would be Top Secret Codeword.

During a brief meeting recently with [REDACTED] he expressed the opinion that a better approach might be to hold several one- or two-day meetings over an extended period of time, possibly with fewer participants. This option will be discussed with the Steering Group when formed.

STAT

Phase 5 -- Preparation of Report

Designated individuals would draft an overview of the colloquium findings and it, along with the invited papers, would form the final report. It will provide options for the Intelligence and R&D Communities regarding collection needs and information to policymakers and military planners on the issues involved. With classification safeguards and sanitization, a

summary possibly could be prepared for release to Congress and the public.

III. RESOURCES

It is estimated that the external cost of such a project would approximate \$30,000, which will include appropriate payments to non-government report writers, and that one professional and one clerical would be required to supplement temporarily the STIC Secretariat.






IV. TIMING

A schedule of the project is attached. A realistic target date for a final report is March 1978.

PROPOSED TIMETABLE

/ Aug / Sept / Oct / Nov / Dec / Jan / Feb / Mar /

Phase

1.  Identify Key Areas
& Select Authors
2.  Authors Prepare Papers
3.  STAP Steering Grp.
Mtg. & STAP Review
4.  Preparations for Colloquium
5.  Summary Report

OFFICIAL USE ONLY